

Listing of Claims:

The following listing of claims replaces all prior versions and listings of claims in the application. Additions are indicated by underlining and deletions are indicated by ~~striketrough~~. Please note that "Original" claims refer to claims as presented in International Application PCT/DK03/00127.

1. - 7. (Cancelled)

8. (Amended) ~~Use according to any of claims 1-7~~ The method according to claim 39 or 44, wherein said glycosylation site is an *in vivo* N-glycosylation site.

9. (Amended) ~~Use~~ The method according to claim 8, wherein the IFNB variant is asialo-glycosylated.

10. (Amended) ~~Use according to any of claims 1-9~~ The method according to claim 39 or 44, wherein the amino acid sequence of said variant differs from the amino acid sequence of wild-type human IFNB (SEQ ID NO:2) in 1-15 amino acid residues.

11. (Amended) ~~Use according to any of claims 1-10~~ The method according to claim 39 or 44, wherein said at least one glycosylation site is introduced by a substitution selected from the group consisting of S2N+N4T/S, L9N+R11T/S, R11N, S12N+N14T/S, F15N+C17S/T, Q16N+Q18T/S, K19N+L21T/S, Q23N+H25T/S, G26N+L28T/S, R27N+E29T/S, L28N+Y30T/S, D39T/S, K45N+L47T/S, Q46N+Q48T/S, Q48N+F50T/S, Q49N+Q51T/S, Q51N+E53T/S, R71N+D73T/S, Q72N, D73N, S75N, S76N+G78T/S, L88T/S, Y92T/S, N93N+I95T/S, L98T/S, E103N+K105T/S, E104N+L106T/S, E107N+E109T/S, K108N+D110T/S, D110N, F111N+R113T/S and L116N.

12. (Amended) ~~Use~~The method according to claim 11, wherein said substitutions are selected from the group consisting of S2N+N4T, L9N+R11T, Q49N+Q51T, R71N+D73T and F111N+R113T.

13. (Amended) ~~Use~~The method according to claim 12, wherein said substitutions are selected from the group consisting of Q49N+Q51T, R71N+D73T and F111N+R113T.

14. (Amended) ~~Use~~The method according to claim 13, wherein said substitutions are selected from the group consisting of Q49N+Q51T and F111N+R113T.

15. (Amended) ~~Use~~The method according to ~~any of claims 11-14~~ claim 11, wherein said variant comprises substitutions selected from the group consisting of
Q49N+Q51T+F111N+R113T,
Q49N+Q51T+R71N+D73T+ F111N+ R113T,
S2N+N4T+F111N+R113T,
S2N+N4T+Q49N+Q51T,
S2N+N4T+Q49N+Q51T+F111N+R113T,
S2N+N4T+L9N+R11T+Q49N+Q51T,
S2N+N4T+L9N+R11T+F111N+R113T,
S2N+N4T+L9N+R11T+Q49N+Q51T+F111N+R113T,
L9N+R11T+Q49N+Q51T,
L9N+R11T+Q49N+Q51T+F111N+R113T and
L9N+R11T+F111N+R113T.

16. (Amended) ~~Use~~The method according to claim 15, wherein said variant comprises the substitutions Q49N+Q51T+F111N+R113T.

17. (Amended) ~~Use according to any of claims 1-16~~ The method according to claim 39 or 44, wherein the cysteine residue located at position 17 in human wild-type IFNB (SEQ ID NO:2) has been removed.

18. (Amended) ~~Use~~ The method according to claim 17, wherein said cysteine residue has been removed by the substitution C17S.

19. (Amended) ~~Use~~ The method according to claim 18, wherein said variant comprises substitutions selected from the group consisting of

C17S+Q49N+Q51T,
C17S+F111N+R113T,
C17S+Q49N+Q51T+F111N+R113T,
C17S+Q49N+Q51T+R71N+D73T+ F111N+R113T,
S2N+N4T+C17S+F111N+R113T,
S2N+N4T+C17S+Q49N+Q51T,
S2N+N4T+C17S+Q49N+Q51T+F111N+R113T,
S2N+N4T+L9N+R11T+C17S+Q49N+Q51T,
S2N+N4T+L9N+R11T+C17S+F111N+R113T,
S2N+N4T+L9N+R11T+C17S+Q49N+Q51T+F111N+R113T,
L9N+R11T+C17S+Q49N+Q51T,
L9N+R11T+C17S+Q49N+Q51T+F111N+R113T and
L9N+R11T+C17S+F111N+R113T.

20. (Amended) ~~Use~~ The method according to claim 19, wherein said variant comprises the substitutions C17S+Q49N+Q51T+F111N+R113T.

21. (Amended) ~~Use according to any of claims 1-20~~ The method according to claim 39 or 44, wherein said variant comprises a substitution in position 110.

22. (Amended) ~~Use~~ The method according to claim 21, wherein said substitution is selected from the group consisting of D110F, D110V, D110W and D110Y.

23. (Amended) ~~Use~~ The method according to claim 22, wherein said substitution is D110F.

24. (Amended) ~~Use~~ The method according to claim 23, wherein said variant comprises substitutions selected from the group consisting of

C17S+D110F+F111N+R113T,

C17S+Q49N+Q51T+D110F+F111N+R113T,

C17S+Q49N+Q51T+R71N+D73T+D110F+F111N+R113T,

S2N+N4T+C17S+D110F+F111N+R113T,

S2N+N4T+C17S+Q49N+Q51T+D110F+F111N+R113T,

S2N+N4T+L9N+R11T+C17S+D110F+F111N+R113T,

S2N+N4T+L9N+R11T+C17S+Q49N+Q51T+D110F+F111N+R113T,

L9N+R11T+C17S+Q49N+Q51T+D110F+F111N+R113T and

L9N+R11T+C17S+D110F+F111N+R113T.

25. (Amended) ~~Use~~ The method according to claim 24, wherein said variant comprises the substitutions C17S+Q49N+Q51T+D110F+F111N+R113T.

26. (Amended) ~~Use~~ The method according to claim 25, wherein said variant has the amino acid sequence shown in SEQ ID NO:3.

27. (Amended) ~~Use according to any of claims 1-26~~ The method according to claim 39 or 44, wherein a polymer molecule is covalently attached to an amino acid residue of the variant, said amino acid residue comprising an attachment group for the polymer molecule.

28. (Amended) ~~Use~~ The method according to claim 27, wherein said polymer is a PEG molecule.

29. (Amended) ~~Use~~ The method according to claim 27 ~~or 28~~, wherein said attachment group is the ϵ -amino group of a lysine residue or the N-terminal amino group.

30. (Amended) ~~Use~~ The method according to ~~any of claims 27-29~~ claim 27, wherein at least one lysine residue has been removed.

31. (Amended) ~~Use~~ The method according to claim 30, wherein said lysine residue is selected from the group consisting of K19, K33, K45, K52, K99, K105, K108, K115, K123, K134 and K136.

32. (Amended) ~~Use~~ The method according to claim 31, wherein said lysine residue is selected from the group consisting of K19, K33, K45 and K123.

33. (Amended) ~~Use~~ The method according to ~~any of claims 30-32~~ claim 30, wherein said lysine residue has been removed by substituting said lysine residue with an arginine or glutamine residue.

34. (Amended) ~~Use~~ The method according to claim 33, wherein said substitution(s) is (are) selected from the group consisting of K19R, K33R, K45R, K123R, K19R+K33R, K19R+K45R, K19R+K123R, K33R+K45R, K33R+K123R, K45R+K123R, K19R+K45R+K123R, K19R+K33R+K123R, K19R+K33R+K45R, K33R+K45R+K123R and K19R+K33R+K45R+K123R.

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Preliminary Amendment

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35. (Amended) ~~Use~~ The method according to claim 34, wherein said substitutions are selected from the group consisting of K19R+K45R+K123R, K19R+K33R+K123R, K19R+K33R+K45R and K33R+K45R+K123R.

36. (Amended) ~~Use~~ The method according to claim 35, wherein said substitutions are selected from the group consisting of K19R+K33R+K45R.

37. (Amended) ~~Use~~ The method according to claim 36, wherein said variant comprises substitutions selected from the group consisting of

C17S+Q49N+Q51T+K19R+K33R+K45R,

C17S+D110F+F111N+R113T+K19R+K33R+K45R,

C17S+Q49N+Q51T+D110F+F111N+R113T+K19R+K33R+K45R,

C17S+Q49N+Q51T+R71N+D73T+D110F+F111N+ R113T+K19R+K33R+K45R,

S2N+N4T+C17S+D110F+F111N+R113T+K19R+K33R+K45R,

S2N+N4T+C17S+Q49N+Q51T+D110F+F111N+R113T+K19R+K33R+K45R,

S2N+N4T+L9N+R11T+C17S+D110F+F111N+R113T+K19R+K33R+K45R,

S2N+N4T+L9N+R11T+C17S+Q49N+Q51T+D110F+F111N+R113T+K19R+K33R+ K45R,

L9N+R11T+C17S+Q49N+Q51T+D110F+F111N+R113T+K19R+K33R+K45R and

L9N+R11T+C17S+D110F+F111N+R113T+K19R+K33R+K45R.

38. (Amended) ~~Use~~ The method according to claim 37, wherein said variant comprises the substitutions C17S+Q49N+Q51T+D110F+F111N+R113T+K19R+K33R+K45R.

39. (Original) A method for treating or preventing stroke or cerebrovascular accident (CVA) in a primate, the method comprising administering an effective amount of an interferon β (IFNB) polypeptide variant comprising an amino acid sequence which differs from the amino acid sequence of wild-type human IFNB (SEQ ID NO:2) in that at least one glycosylation site has been introduced, to a primate in need thereof.

40. (Original) The method according to claim 39, wherein said stroke is ischemic stroke.
41. (Original) The method according to claim 40, wherein said ischemic stroke is selected from the group consisting of embolic stroke, cardioembolic stroke, thrombotic stroke, large vessel thrombosis, lacunar infarction, artery-artery stroke and cryptogenic stroke.
42. (Original) The method according to claim 39, wherein said stroke is hemorrhagic stroke.
43. (Original) The method according to claim 42, wherein said hemorrhagic stroke is selected from the group consisting of intraparenchymal stroke, subdural stroke, epidural stroke and subarachnoid stroke.
44. (Original) A method for treating or preventing transient ischemic attack in a primate, the method comprising administering an effective amount of an interferon β (IFNB) polypeptide variant comprising an amino acid sequence which differs from the amino acid sequence of wild-type human IFNB (SEQ ID NO:2) in that at least one glycosylation site has been introduced, to a primate in need thereof.
45. (Amended) The method according to ~~any of claims 39-44~~ claim 39 or 44, wherein said primate is a human.
46. (Cancelled)